WHAT IS CLAIMED IS:

1. A method for controlling a reverse data rate of packet data in a mobile terminal of a mobile communication system, the method comprising the steps of:

a) determining and updating the status of reverse data rate control factors

5   of the mobile terminal; and

b) transmitting status report information in a reverse direction through predetermined channels, the status report information based on the updated factors.

2. The method as set forth in claim 1, wherein the reverse data rate control

10 factors include at least one of a buffer indicator indicating an amount of data stored in a buffer of the mobile terminal, a power indicator indicating an amount of available power of the mobile terminal, a rate request indicator indicating a reverse data rate required by the mobile terminal, a rate limit indicator indicating if a current data rate of the mobile terminal corresponds to a data rate of a

15 predetermined limit value, and a multiple control indicator indicating if a data rate of the mobile terminal is controlled by two or more base stations.

3. The method as set forth in claim 1, wherein the reverse data rate control factors include a power indicator, an increase data rate change indicator, and if the data rate can be increased, the power indicator indicates the number of steps

20 in increasing of the current data rate.

4. The method as set forth in claim 1, wherein the reverse data rate control factors include a buffer indicator, and wherein it is determined if increasing,

decreasing, or maintaining of the data rate is required based on a value of a current buffer state of the mobile terminal, and when an increase or decrease of the data rate is required, the buffer indicator indicates the number of steps to increase or decrease the data rate.

5   5. The method as set forth in claim 1, wherein the reverse data rate control factors include a power indicator and a buffer indicator, the power indicator indicates the number of steps to   increase of current data rate when increasing of the current data rate is possible, and the buffer indicator indicates if an increase or decrease of the data rate is required and the number of steps to

10   increase or decrease   the data rate based on a value of a current buffer state of the mobile terminal, the power indicator and the buffer indicator being transmitted together.

6. The method as set forth in claim 1, wherein a channel for transmitting the status report information is transmitted over a reverse rate indicator channel.

15   7. The method as set forth in claim 1, wherein a channel for transmitting the status report information is transmitted over a reverse status report channel.

8. The method as set forth in claim 1, wherein the reverse data rate control factors include a buffer indicator indicating the amount of data to be transmitted in a reverse direction.

20   9. The method as set forth in claim 8, wherein the buffer indicator indicates an increase or decrease tendency based on the data stored in a buffer.

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10. A method for providing information for reverse data rate control of packet data and determining a data rate in a mobile terminal of a mobile communication system the method comprising the steps of:

checking and updating the status of reverse data rate control factors of the mobile terminal;

transmitting status report information in a reverse direction through predetermined channels the status report information being configured by the updated factors;

receiving reverse activity bits of the mobile terminal determined based on the status report information; and

determining a current data rate base on the received reverse activity bits.

11. The method as set forth in claim 10, wherein the reverse activity bits are information to be determined based on the status report information and the channel and system states.

12. An apparatus for determining a reverse data rate of packet data in a mobile terminal of a mobile communication system the apparatus comprising:

means for determining and updating the status of reverse data rate control factors of the mobile terminal;

means for transmitting stats report information in a reverse direction through predetermined channels, the status report information based on the updated factors;

means for receiving reverse activity bits received from the base station; and

means for determining a current data rate based on the received reverse activity bits.

13. The apparatus as set forth in claim 12, wherein the reverse data rate
5   control factors include at least one of a buffer indicator indicating an amount if data stored in a buffer of the mobile terminal, a power indicator indicating an amount of available power of the mobile terminal, a rate request indicator indicating a reverse data rate required by the mobile terminal, a rate limit indicator indicating if a current data rate of the mobile terminal corresponds to a
10   data rate of a predetermined limit value, and a multiple control indicator indicating if a data rate of the mobile terminal is controlled by two or more base stations.

14. The apparatus as set forth in claim 12, wherein the reverse data rate
15   control factors include a power indicator and a buffer indicator, the power indicator indicates the number of steps to increase current data rate when increasing of the current data rate is possible, and the buffer indicator indicates if an increase or decrease of the data rate is required and the number of steps to increase or decrease the data rate based on a value of a current buffer state of the
20   mobile terminal, the power indicator and the buffer indicator being transmitted together.

15. The apparatus as set forth in claim 12, wherein a channel for transmitting the status report information is transmitted over a reverse rate
25   indicator channel.

16. The apparatus as set forth in claim 12, wherein a channel for transmitting a status report information is transmitted over a reverse status report channel.

5   17. The apparatus as set forth in claim 12, wherein the reverse activity bits are information to be determined based on the status report information and the channel and system states.

. 18.   A method for determining reverse activity bits of a mobile terminal 10 in a base station of a mobile communication system, the method comprising the steps of:

receiving status report information including reverse data rate control factors from the mobile terminal; and

determining reverse activity bits of the mobile terminal based on the 15 received status report information and transmitting the determined reverse activity bits of the mobile terminal.

19. The method as set forth in claim 18, wherein the reverse data rate control factors consist of two or more transmission bits.

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20.   The method as set forth in claim 18, wherein, the status report information includes at least one of a buffer indicating an amount of data stored in a buffer of the mobile terminal, a power indicator indicating an amount available power of the mobile terminal, a rate request indicator indicating a 25 reverse data rate required by the mobile terminal, a rate limit indicator indicating if a current data rate of the mobile terminal corresponds to a data rate of a

predetermined limit value, and a multiple control indicator indicating if a data rate of the mobile terminal is controlled by two or more base stations.

21. The method as set forth in claim 18, wherein the reverse data rate
5   control factors include a power indicator and a buffer indicator, the power indicator indicates the number of steps to increase current data rate when increasing of the current data rate is possible, and the buffer indicator indicates if an increase or decrease of the data rate is required and the number of steps to increase or decrease the date rate based on a value of a current buffer state of the
10 mobile terminal, the power indicator and the buffer indicator being transmitted together.

22.   The method as set forth in claim 18, wherein a channel for transmitting the status report information is transmitted to over a reverse rate
15 indicator channel.

23. The method as set forth in claim 18, wherein a channel for transmitting the status report information is transmitted over a reverse status report channel.
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24.   The method as set forth in claim 18, wherein the reverse activity bits are information to be determined based on the status report information and the channel and system state.

25   25. An apparatus for determining reverse activity bits of a mobile terminal in a base station of a mobile communication system, the apparatus comprising;

means for receiving status report information including reverse data rate control factors from the mobile terminal; and

means for determining reverse activity bits of the mobile terminal based on the received status report information and transmitting the determined reverse
5   activity bits of the mobile terminal.

26. The apparatus as set forth in claim 25, wherein the reverse data rate control factors consist of two or more transmission bits.

10   27. The apparatus as set forth in claim 25, wherein the status report information includes at least one of a buffer indicator indicating an amount of data stored in a buffer of the mobile terminal, a power indicator indicating an amount of available power of the mobile terminal, a rate request indicator indicating a reverse data rate required be the mobile terminal, a rate limit
15   indicator indicating if a current date rate of the mobile terminal corresponds to a data rate of a predetermined limit value, and a , multiple control indicator indicating if a data rate of the mobile terminal is controlled by two or more base stations.

20   28. The apparatus as set forth in claim 25, wherein the reverse data rate control factors include a power indicator and a buffer indicator, the power indicator indicates the number of steps to increase of current data rate when increasing of the current data is possible, and the buffer indicator indicates if an increase or decrease of the data rate is required and the number of steps to
25   increase or decrease the data rate based on a value of a current buffer state of the mobile terminal, the power indicator and the buffer indicator being transmitted

together.

29. The apparatus as set forth in claim 25, wherein a channel for transmitting the status report information is transmitted over a reverse rate indicator channel.

30. The apparatus as set forth in claim 25, wherein a channel for transmitting the status report information is transmitted over a reverse status report channel.

31. The apparatus as set forth in claim 25, wherein the reverse activity bits are information to be determined based on the status report information and the channel and system states.

32. A method for controlling a reverse data rate of packet data in a mobile communication system including mobile terminals and base stations, the method comprising the steps of:

a) determining and updating by each of the mobile terminals the status of reverse data rate control factors of each mobile terminal, and transmitting status report information in a reverse direction over predetermined channels, the status report information being configured by the updated factors;

b) by each of the base stations, receiving the status report information, generating reverse activity information for each mobile terminal based on the received status report information and the channel and system states, and transmitting the generated reverse activity information to each mobile terminal; and

c) changing or maintaining by each of the mobile terminals a current data rate of each mobile terminal based on the reverse activity information.

33. The method as set forth in claim 32, wherein the reverse data rate control factors include at least one of a buffer indicator indicating a buffer of each mobile terminal, a power indicator indicating an amount of power of each mobile terminal, a rate request indicator indicating a reverse data rate required by each mobile terminal, a rate limit indicator indicating if a current data rate of each mobile terminal corresponds to a data rate of a predetermined limit value, and a multiple control indicator indicating if a data rate of the mobile terminal is controlled by two or more base stations.

34. The method as set forth in claim 32, wherein the reverse data rate control factors include a power indicator, and when an increase of a current data rate of the mobile terminal is possible, the power indicator indicates the number of steps to increase   the current data rate.

35. The method as set forth in claim 32, wherein the reverse data rate control factors include a buffer indicator, and wherein it is determined if increasing, decreasing, or maintaining of the data rate is required based on a value of a current buffer state of the mobile terminal, and when an increase or a decrease of the data rate is required, the buffer indicator indicates the number of steps to increase or decrease the data rate.

36. The method as set forth in claim 32, wherein the reverse data rate control factors include a power indicator and a buffer indicator, the power

indicator indicates the number of steps to increase a current data rate when increasing of the current data rate is possible, and the buffer indicator indicates if an increase, decrease, or maintaining of the data rate is required based on a value of a current buffer state of the mobile terminal, and indicates the number of steps

5   to increase or decrease the data rate when an increase or decrease of the data rate is required, the power indicator and the buffer indicator being transmitted together.

37. The method as set forth in claim 32, wherein a channel for transmitting the status report information is transmitted over a reverse rate

10   indicator channel.

38. The method as set forth in claim 32, wherein a channel for transmitting the status report information is transmitted over a reverse status report channel.

39. The method as set forth in claim 32, wherein the reverse activity

15   information consists of at least two bits such that increasing or decreasing of the data rate of the mobile terminal is changed by one step, two steps or more steps.

40. An apparatus for controlling a reverse packet data rate in a mobile communication system including mobile terminals and base stations, wherein each of the mobile terminals determines and updates the status of reverse data

20   rate control factors of each mobile terminal and transmits status report information in a reverse direction over predetermined channels, the status report information based on the updated factors,

wherein each of the base stations receives the status report information, generates reverse activity information for each mobile terminal based on the received status report information and the channel and system states, and transmits the generated reverse activity information to each mobile terminal.

5   41. An apparatus as set forth in claim 40, wherein each of the mobile terminals changes or maintains a current data rate based on the reverse activity information.

      42. The apparatus as set forth in claim 40, wherein the reverse data rate

10   control factors include at least one of a buffer indicator indicating an amount of data stored in a buffer of each mobile terminal, a power indicator indicating if an increasing in a power level of each mobile terminal is possible, a rate request indicator indicating a reverse data rate required by each mobile terminal, a rate limit indicator indicating if a current data rate of each mobile terminal

15   corresponds to a data rate of a predetermined limit value, and a multiple control indicator indicating if the data rate of the mobile terminal is controlled by two or more base stations.

      43. The apparatus as set forth in claim 40, wherein the reverse activity information consists of at least two bits such that increasing or decreasing of the

20   data rate of the mobile terminal is changed by one step, two steps or more steps.

      44. The apparatus as set forth in claim 40, wherein each of the base stations determines the reverse activity information for each mobile terminal and transmits the determined reverse activity information to each mobile terminal.